

On page 1 of the specification before the second complete paragraph, please insert the following section heading:

2. Description of the Related Art

On page 2 of the specification before the first complete paragraph, please insert the following section heading:

SUMMARY OF THE INVENTION

On page 6 of the specification after the third complete paragraph, please insert the following section heading:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 7 of the specification before the first complete paragraph, please insert the following section heading:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

IN THE CLAIMS:

Original claims 1-25 were amended during Chapter II with a letter dated 03 August 2001. Please cancel all pending claims and rewrite them as new claims 26-49 as follows:

26. A device for separating a mixture of gas with liquid and/or solids, comprising a processing vessel comprising:

an inlet for a supply of the mixture to be separated;

a first and second outlet opening for a discharge of respectively a first mixture part and a second mixture part into a space of a further vessel;

A2 a flow body arranged substantially concentrically in the processing vessel and provided with one or more swirl elements for setting the supplied mixture into swirling movement;

32. The device as claimed in claim 26, including a perforated plate placed close to the second outlet opening and downstream thereof for ensuring a substantially uniform velocity profile on a downstream side thereof.

33. The device as claimed in claim 26, wherein a swirl element includes one or more swirling blades, wherein the swirling blades are formed for setting into swirling movement or at least increasing the swirling movement of the mixture or mixture part flowing thereamong.

34. The device as claimed in claim 26, wherein a counter-swirl element includes one or more swirling blades, wherein the swirling blades are formed for decreasing the swirling movement of the mixture or mixture part flowing thereamong.

35. The device as claimed in claim 34, wherein an angle between a longitudinal direction of the processing vessel and a swirling blade amount to between approximately 0 and 80 degrees.

36. The device as claimed in claim 34, wherein the swirling blades are curved.

37. The device as claimed in claim 26, wherein the processing vessel includes an inner jacket which includes a conically tapering part in a flow direction.

38. The device as claimed in claim 37, wherein the conically tapering part is positioned between the swirl element and the resistance element.

39. The device as claimed in claim 26, wherein the first mixture part is formed by a light fraction, while the second mixture part is formed by a heavy fraction.

40. The device as claimed in claim 39, wherein the light fraction includes one or more gases and the heavy fraction includes one or more liquids.

41. The device as claimed in claim 39, wherein the light fraction comprises natural gas and the heavy fraction comprises oil and water.

42. The device as claimed in claim 26, wherein the first mixture part includes approximately 1% by volume of water and/or solids and the second mixture part includes at least approximately 95% by volume of liquid and/or solids.

43. The device as claimed in claim 26, wherein components of the processing vessel are embodied such that they can be fed through a manhole into a gravity separation vessel.

44. The device as claimed in claim 43, wherein a greatest dimension of a component amounts to a maximum of approximately 150 cm.

45. A device for separating a mixture of gas with liquid and/or solids, comprising:

a gravity separation vessel which is provided with an inlet for a supply of the mixture;

a processing vessel including:

an inlet for a supply of the mixture to be separated;

a first and second outlet opening for a discharge of respectively a first mixture part and a second mixture part into a space of a further vessel;

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a flow body arranged substantially concentrically in the processing vessel and provided with one or more swirl elements for setting the supplied mixture into swirling movement;

a discharge channel for discharging the first mixture part to the first outlet opening, which discharge channel is arranged substantially through an interior of the flow body and extends from a downstream side of the flow body to the first outlet opening;

a first resistance element with a predetermined flow resistance arranged between the second outlet opening and the flow body; and/or

a second resistance element with a predetermined flow resistance, arranged in the discharge channel, downstream of which the first outlet opening is arranged,

the processing vessel can be mounted in the gravity separation vessel with the inlet connected to the inlet of the gravity separation vessel, wherein the first and second outlet openings of the processing vessel are arranged for the discharge of the first mixture part and the second mixture part into a space of the gravity separation vessel for further separation of the second mixture part.

46. The device as claimed in claim 45, wherein the second outlet of the processing vessel is placed at least partially in the second mixture part situated in the space so as to keep an open connection between the processing vessel and said space inside the separation vessel.

47. A method for treating a mixture of gas with liquid and/or solids, comprising the step of applying ^{not a method} a device for separating a mixture of gas with liquid and/or solids, ^{device} comprising a processing vessel comprising:

an inlet for a supply of the mixture to be separated;

a first and second outlet opening for a discharge of respectively a first mixture part and a second mixture part into a space of a further vessel;

a flow body arranged substantially concentrically in the processing vessel and provided with one or more swirl elements for setting the supplied mixture into swirling movement;

a discharge channel for discharging the first mixture part to the first outlet opening, which discharge channel is arranged substantially through an interior of the flow body and extends from a downstream side of the flow body to the first outlet opening;

a first resistance element with a predetermined flow resistance arranged between the second outlet opening and the flow body; and/or

a second resistance element with a predetermined flow resistance, arranged in the discharge channel, downstream of which the first outlet opening is arranged.

48. A method for designing a device for separating a mixture into a light and heavy fraction, comprising the step of designing components of a processing vessel such that the components can be fed through a manhole into a gravity separation vessel, wherein the processing vessel comprises an inlet for the mixture, a first outlet for the light fraction and a second outlet for the heavy fraction, in addition to rotation means for setting the mixture into rotation, wherein swirl elements arranged close to the inlet and/or counter-swirl elements arranged close to the first and second outlet are provided with swirling blades dimensioned such that through the desired degree of rotation a preselected pressure is available whereby the boundary surface between the heavy and light fraction extends on a preselected level within the processing vessel.